



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMERCIAL CENTER, PATENTS AND TRADEMARKS
Washington, D.C. 20540
www.uspto.gov

APPLICATION NO	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO	CONFIRMATION NO
09 482,731	01 14 2000	Atsushi Murakami	266036	7400

409 7500 11 29 2001

PILLSBURY WINTHROP LLP
1600 TYSONS BOULEVARD
MCLEAN, VA 22102

EXAMINER

VO. HAI

ART UNIT	PAPER NUMBER
----------	--------------

1771

DATE MAILED: 11 29 2001

7

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/482,731

Applicant(s)

MURAKAMI ET AL.

Examiner

Hai Vo

Art Unit

1771

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-48 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-48 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) ____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Art Unit: 1771

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 5-11, 14, 16, 17, 19, 22-25, 28-30, 44 and 48 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 96/28297 substantially as set forth in Paper No. 5. With newly added claim 44, WO'297 discloses the fiber-reinforced thermoplastic resin expanded body including the thermoplastic elastomer (column 5, line 54). With newly added claim 48, WO'297 does not disclose the compressive hardness of the foam. However, since the sound absorbing element of WO'297 is structurally the same, and made of the same materials as the presently claimed composite. It is the examiner's position that the sound absorbing element of WO'297 would inherently exhibit the same compressive strength as the composite structure of present invention.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1771

4. Claims 4, 12, 15, 20, 21, 26, 27, and 46-47 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/28297 substantially as set forth in Paper No. 5. With regard to newly added claim 46, WO'297 discloses through-holes formed in the fiber-reinforced thermoplastic resin expanded body (column 8, lines 4-7). WO'297 does not mention through-holes having plurality of diameters, shapes and depths. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have formed through-holes having plurality of diameters, shapes and depths motivated by the desire to enhance the heat radiation effect. With newly added claim 47, WO' 297 is silent as to the bulk density range of the porous member. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have altered the bulk density range of the porous member since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. *In re Aller*, 105 USPQ 233. It would have been obvious to the skilled artisan to have optimized the bulk density range of the porous member motivated by the desire to control the porosity of the porous member, so that the desired sound absorption is achieved. WO'297 does not disclose the coefficient of water absorption of the foam. However, since the sound absorbing element of WO'297 is structurally the same, and made of the same materials as the presently claimed composite. It is the examiner's position that the sound absorbing element of WO'297 would inherently exhibit the same water absorption property as the composite structure of present invention.

Application/Control Number: 09/482,731
Art Unit: 1771

5. Claims 31-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/28297 in view of Sensenig (US 5,888,626) substantially as set forth in Paper No. 5.
6. Claim 45 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/28297 in view of Burke (US 5,080,950). WO'297 is silent as to the foam made from mixing of open-cells and closed cells. Burke supplies the missing feature (column 2, lines 52-55). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have made the foam having both open cells and closed cells because it is known in the art, the foamed rubber can be constructed of both open cells and closed cells, depending upon the application to which the foam is to be used.
7. Claims 13 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 96/28297 in view of WO 97/27370. WO'297 meets all the limitations as recited within claim 1. WO'297 fails to teach the sound absorbing structure having the porous members that are secured to each other by pins and sewing. WO'370 supplies the missing feature (page 8, line 2). It would have been obvious to one having ordinary skill in the art at the time the invention was made to have secured the porous members to each other by pins and sewing motivated by the desire to promote the adherence.

Response to Arguments

8. The art rejections over WO 97/27370 have been overcome by the present response.

Art Unit: 1771

9. Applicant's arguments filed 10/13/01 have been fully considered but they are not persuasive. The art rejections over WO 96/28297 are maintained because of the following reasons. The argument that WO'297 does not teach the use of through-holes is not persuasive because WO'297 discloses through-holes formed in the fiber-reinforced thermoplastic resin expanded body (column 8, lines 4-7). The argument that there is no teaching of holes or perforations in Sensenig reference is not persuasive because WO'297, the primary reference itself discloses the use of through-holes in the foam member (column 8, lines 4-7).
10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hai Vo whose telephone number is (703) 605-4426. The examiner can normally be reached on Monday to Friday, 8:30 to 5:00 (EAST). If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Blaine Copenheaver can be reached on (703) 308-1261. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

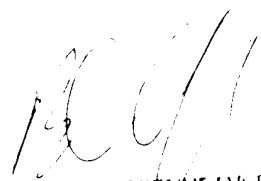
Application/Control Number: 09/482,731

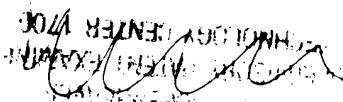
Page 6

Art Unit: 1771

HV

November 20, 2001


BLAINE COPENHEAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700


BLAINE COPENHEAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700